

HINTS ON DRAWING
FOR
PROCESS REPRODUCTION

BY
CHARLES J. VINE



CHARLES ROBERSON & Co.,
ARTISTS' COLOUR MANUFACTORY,
99, LONG ACRE, LONDON.

1895

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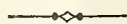


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INTRODUCTION.



WORKS on drawing for process reproduction have multiplied at an alarming rate of late years.

Yet the present little summary is offered without apology, for the exhaustive works that have been published hitherto contain much matter that is not absolutely essential to a ready grasp of the subject.

Not that this handbook is intended to rival those more complete works that have gone before.

It is, rather, advanced as a concise practical summary of results obtained in the experience and by the experiments of the writer, and as such will, he ventures to hope, prove of some use to those who intend to graduate in that important branch of art, Drawing for Reproduction.

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HINTS ON DRAWING FOR PROCESS REPRODUCTION.



CHAPTER I.

PEN-AND-INK.

IT is very necessary that the draughtsman should have some knowledge of the various processes by which his work is reproduced, so that he be able to determine whether a drawing meets the requirements of certain processes or not.

A want of this technical knowledge is frequently shown by those who seldom draw for process ; and while on that account it may not be very reprehensible, it is disastrous nevertheless.

It would be an admirable thing if all artists would bring themselves to recognise the fact that anything with a tendency to blue will not “come” well ; that colour or tint is dangerous ; and that simple black (for line work), and the greys obtainable from it (for half-tone), are the safest materials.

It is now understood why faint grey lines, if they reproduce at all, come as solid on the ordinary zinco block as does the firmest black line. The reason is sufficiently obvious, but may be given here.

A photograph or negative is made from the drawing,

and by the action of light is transferred to sensitised zinc, and then etched.

The block made, it is obvious that any line that receives the ink, no matter what tint it may have been in the original drawing, is rendered black as printer's ink can make it.

Manifestly, then, the only way in which *parts* of such a block could be made to print grey would be to induce the printer to use a *grey ink* for those parts or lines, and *black* for the remainder—a thing at once ridiculous and impossible.

A proof from any block whatsoever is necessarily composed of solid black lines or dots, however grey some portions may appear.

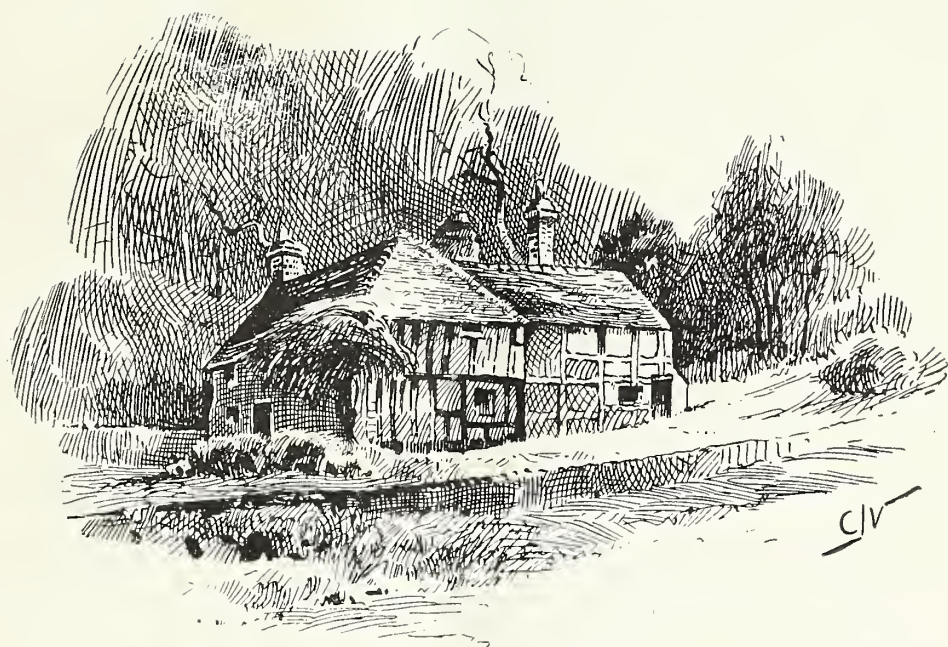
Only solid black lines or dots, then, are permissible in a pen drawing.

The materials required are few and simple. Bourgeois's "Encre de Chine" is a reliable black, and good hard Bristol board offers the best drawing surface. As to pens, any pen, from Gillott's excessively fine No. 1,000 to the clumsy natural crow-quill or reed pen, may be used, though Gillott's No. 659 is perhaps most generally useful and most used.

There are hosts of other materials—blacks, and boards, and even pens, but those mentioned suffice.

To demonstrate the importance to the process-man of a good firm line, a drawing (Example 1) was made on Whatman's hot-pressed paper, a surface which, though tolerably smooth and glazed, is yet slightly uneven, and splits up the lines.

The pen was used lightly, because heavy strokes cut

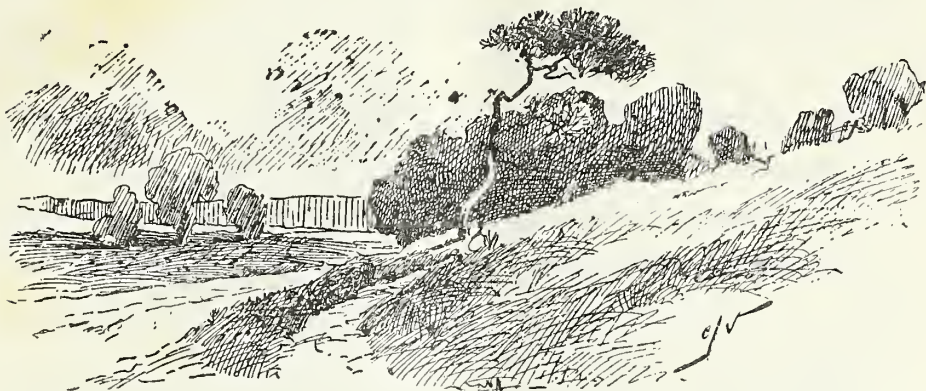


PEN.

Example showing the over-neat or woolly effect produced by too much cross-hatching.

the surface, and give a line that is jagged, and consequently very bad for reproduction.

It is instructive to compare this with the drawings made on the harder and more suitable Bristol board



EXAMPLE 1.

(Examples 2 and 3). In these latter there is no uncertainty about any portion of the work whatever; whereas in the former many lines are weak or broken, and some have been lost altogether.

Such a result is, naturally, more or less detrimental to a drawing.

The swelled gelatine process reproduces such a drawing as Example 1 much more satisfactorily; but it is more costly, and therefore is not viewed with especial favour by publishers, who rightly consider that a simple line drawing should be reproducible by the ordinary line etching process.

In the swelled gelatine process the drawing is photographed as though for ordinary zinco, and the negative then brought into contact with sensitised gelatine, which receives the impression of the drawing. It is then placed in water, with the result that the gelatine, except those

parts which have received the impression, swells. Thus each line or dot is sunk to a uniform depth, and this forms the matrix for the electrotyper, who thereupon makes a cast in plaster, and from this a mould in wax. On this latter copper is deposited; and thus those lines and dots that were sunken, and which represent the original drawing, come out in relief and print black, while the remaining portions are sunken and show white.

It will be seen that there is in this process no risk of acid biting up lines and spoiling a drawing, and every mark, ink and pencil, black or grey, that the original drawing contained appears on the finished block.

The process has been explained thus fully because it affords an almost perfect means of reproducing a "doubtful" pen drawing. There is, however, no reason why such a thing as a "doubtful" pen drawing should exist. The swelled gelatine process, as a matter of fact, is chiefly valued for its excellent reproductions of pencil-work.

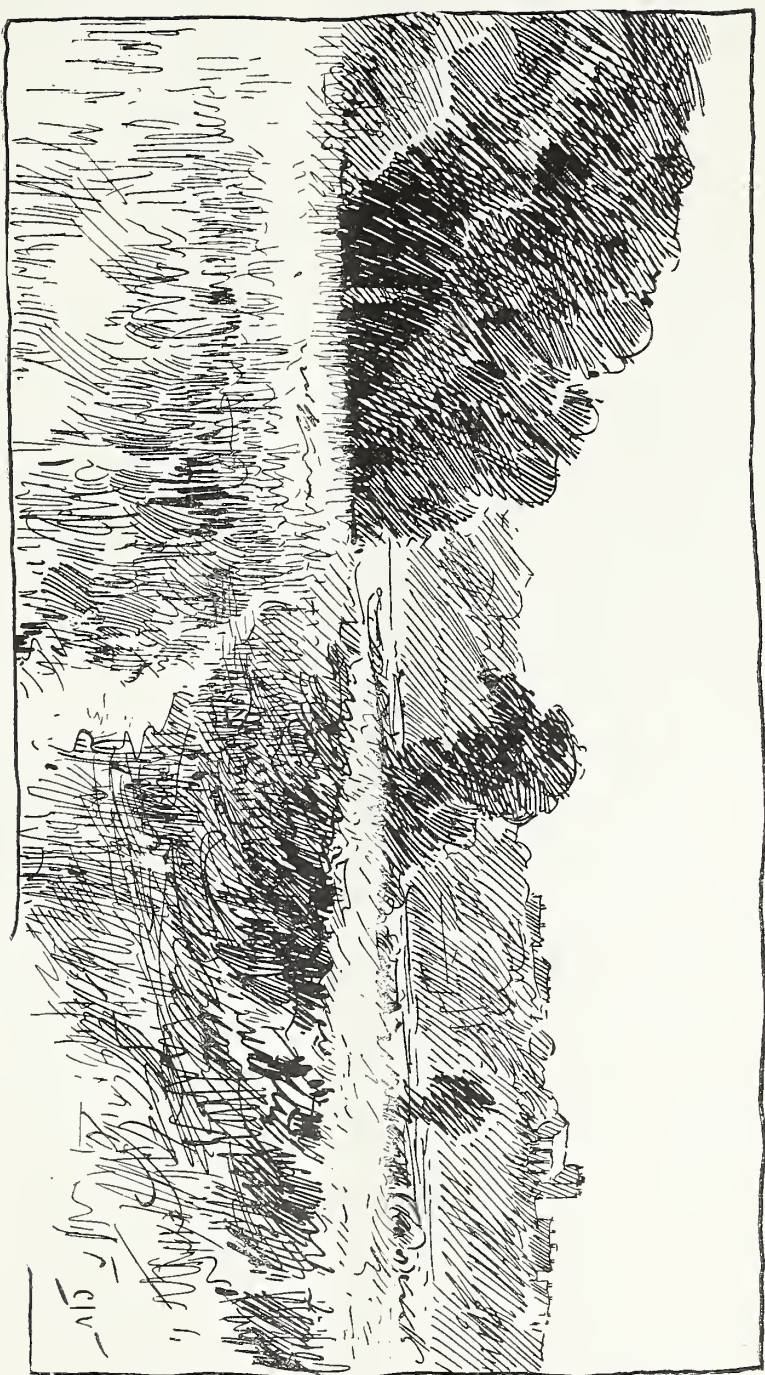
A reduction of pen drawings by one-third is often advocated, but is not imperative; indeed, it is frequently impolitic.

Each drawing should be taken on its merits, and reduced as much as appears necessary. The extent of the reduction must depend entirely upon the fineness of the work and the amount of detail. Fine, highly-finished work need not be reduced at all, or only just sufficiently to obtain sharpness. Coarse, open work may be safely reduced two-thirds. A diminishing-glass will enable the draughtsman to determine to what extent any drawing should be reduced.

In regard to particular lines, methods, or styles, no hard-and-fast rules can be laid down. Some men weave



PEN.— Example 2

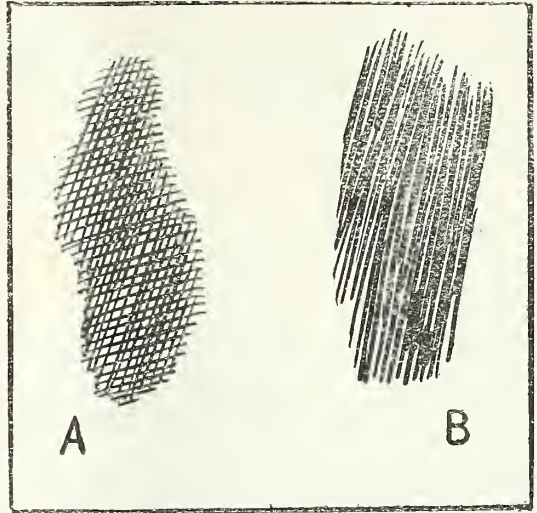


PEN.—Example 3.

the most beautiful drawings by means of a tangle of (apparently) haphazard, meaningless scribbles !

Cross-hatching (Example 4A), as a mode of obtaining depth of shadow, is not now in much favour. It oftentimes results in woolliness or stiffness, and it is now considered preferable to obtain the requisite depth by means of bold direct shading (Example 4B).

Cross-hatching is a very satisfactory method of representing the texture of fabrics and cloth, however. Furthermore, a little of it imparts variety to a drawing ; while, if the lines be solid, it reproduces well.



EXAMPLE 4.

In penwork, the pencilling-in is of great importance. It should, in fact, be done with as great care as though each line were as irrevocable as those of the pen.

This applies more particularly to figure-drawing ; but it is also advisable in other branches.

For this preliminary care is often productive of many beautiful lines and curves in the finished pen drawing which might otherwise have been lost.

If any errors be made, they should be scratched away. This is preferable to painting-out with Chinese white, for the latter, unless applied so thinly as to be ineffectual in covering the error, is apt to throw a slight

shadow, which comes out as a black patch or line in the reproduction.

If it be necessary to work over a part where an erasure has been made, it may be thinly coated with Chinese white to make the surface clean and smooth, and the re-drawing done with a fine sable brush.

Such retouching is seldom entirely satisfactory, however.

CHAPTER II.

LINED SCRAPER-BOARDS.

FOR work in which no very delicate gradation of tone is required the numerous lined boards are admirably adapted.

Scraper-boards have not been fully developed in this country. The French are far ahead of us in this, as in many other matters pertaining to process reproduction, as witness the Paris Salon Catalogue, to mention one instance.

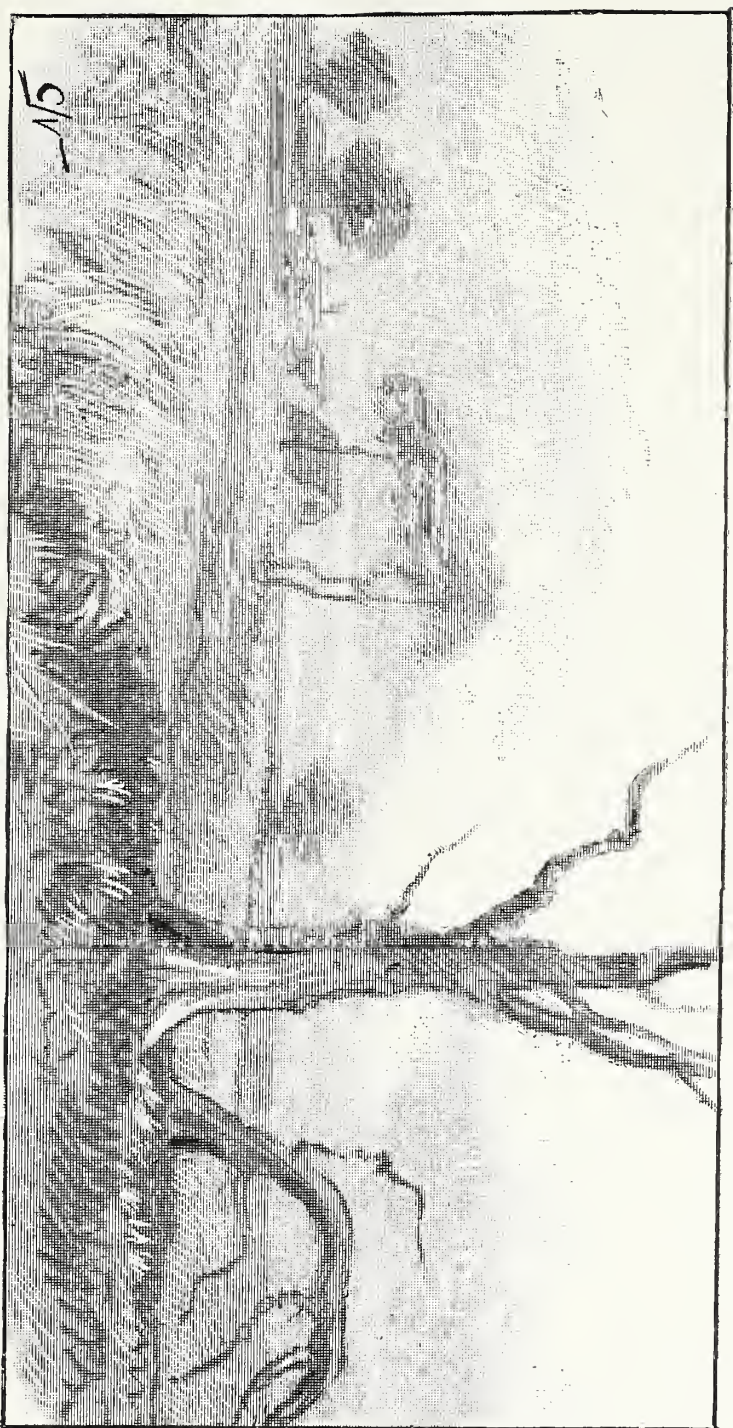
In the pages of that publication the boards are used very extensively, and show what is possible with them in competent hands.

The chief argument in favour of their free use is, that drawings made upon them can be reproduced by the inexpensive photo-zinco process described in the chapter on Pen-and-Ink; while the chief complaint urged against them is that they are harsh and crude in effect.

A slight coarseness seems to be inseparable from them, even when drawings are very much reduced.



SCRAPER BOARDS.—(1) Black Diagonal Gillot.



SCRAPER BOARDS.—(2) Black Straight Gillot

The reason is, that the contrast of the original grey or full-tone with the half-tone (produced by scraping) is too sharp.

This is especially noticeable when a drawing on scraper-board is compared with the ordinary half-tone Meisenbach or what not (see page 20).

This crudity, however, may be partly removed by great reduction, and in other ways.

Take, for example, the black diagonal Gillot board.

This is the most used of the series, as it gives a passable imitation of the costly half-tone process. It is surfaced with clay to enable scratching-out to be done upon it, and has a clay rib which runs *straight* along the entire length of the board, and over this rib the black lines are printed *diagonally*.

If the surface be scraped lightly, the lines are partially scraped away, and dots remain.

This dot constitutes the half-tone, and it is of this that the complaint of harshness is made. It is too light compared with the full-tone formed by the original solid lines.

Yet this defect can be neutralised by dragging the one over the other, so to speak, and by breaking up the hard edges where half and full tone meet by means of a series of fine distinct scratches, made with the extreme point of the knife or scraper.

By this expedient the gradation is rendered much easier and more gentle.

Pure whites are produced by scraping down through to the composition ; and it is well here to impress upon the artist the need of great caution when scraping to obtain a

half-tone, lest in using the scraper he inadvertently scrapes too heavily, and thus produces a high light, which tends to spoil the breadth and neatness of the half-tone.

For this reason it is advisable to use one of the scrapers made for the purpose.

They are more curved than a knife-blade, and work more equably and comfortably; while, being of a harder steel, they retain their edge much longer and do not require sharpening so often.

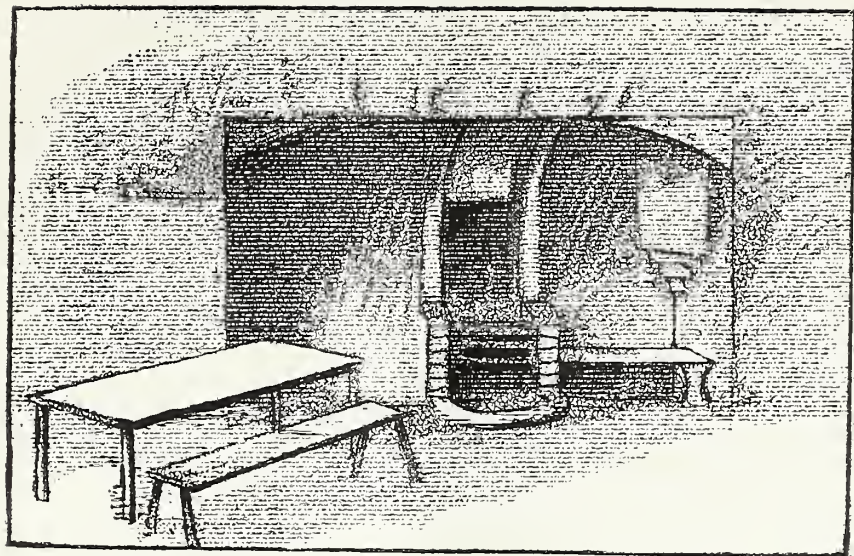
The chalk *par excellence* for working upon Gillot and other scraper-boards is Lemercier's Lithographic Chalk No. 1; first, because it works freely, and does not rub or smear when the drawing is finished (and therefore requires no fixing); and secondly, because it is quite black. Lemercier's Copal Chalk is slightly harder, and will give a finer point, should such be required; but for ordinary work the No. 1 will be found good enough.

A very charming effect may be obtained on either the diagonal or straight Gillot (which latter differs from the diagonal in that the lines are laid at right angles across the clay rib) by using pen and chalk in the same sketch.

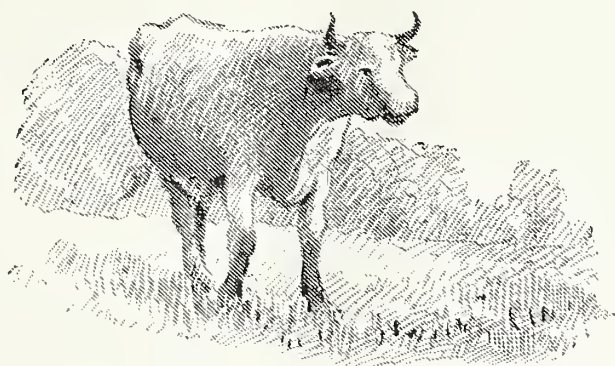
It is necessary, or at all events advisable, to put in the penwork first, as it is difficult to work over the greasy lithographic chalk.

The pen lines, too, should be fine—not grey, but fine—so that they do not tell too strongly against the exquisite fineness of the printed lines.

Lights should be left until all chalk and pen work is finished, and then carefully taken out wherever necessary. This advice also holds good in regard to the half-tone; though on the latter no chalk work and very little pen



SCRAPER BOARDS.—(3) Black Aquatint Gillot.



SCRAPER BOARDS.—(4) White Diagonal Gillot.



SCRAPER BOARDS.—(5) White Straight Gillot.

work should be put, as it induces hardness. The effect of pen work on this half-tone is seen in Example 1 (black diagonal Gillot).

Between the white Gillots there is little to choose as regards usefulness. In all, errors of the pencil may be taken out with the scraper; though this should not be done until the actual drawing is finished, as the scraper removes the rib of the board and leaves a surface quite plain and flat.

The half-tone produced on the black Gillots by light scraping cannot, of course, be obtained on the white, and the nearest approach to it is fine line work, which gives a dot effect. The sketches on white diagonal and white straight show this.

The white Gillots are used whenever a bold effectiveness of touch is desired.

For fine detail and for small work a hard pencil (say H) may be employed in place of the lithographic chalk. Pencil entails a little more care in making the block; but it generally reproduces very successfully on these white boards.

The sketches on white straight and white diagonal were drawn with pencil. It should be borne in mind that the pencil reproduces black, not grey, as it appears in the finished drawing.

There is, without doubt, an amount of vigour about work done on these boards that is not to be found in work reproduced by the usually monotonous half-tone process, costly though it is, and the drawing is reproduced exactly as it leaves the hands of the artist. All the white half-tone and full-tone of the original drawing is reproduced on the block without variation, or with a variation so slight as to be barely perceptible.

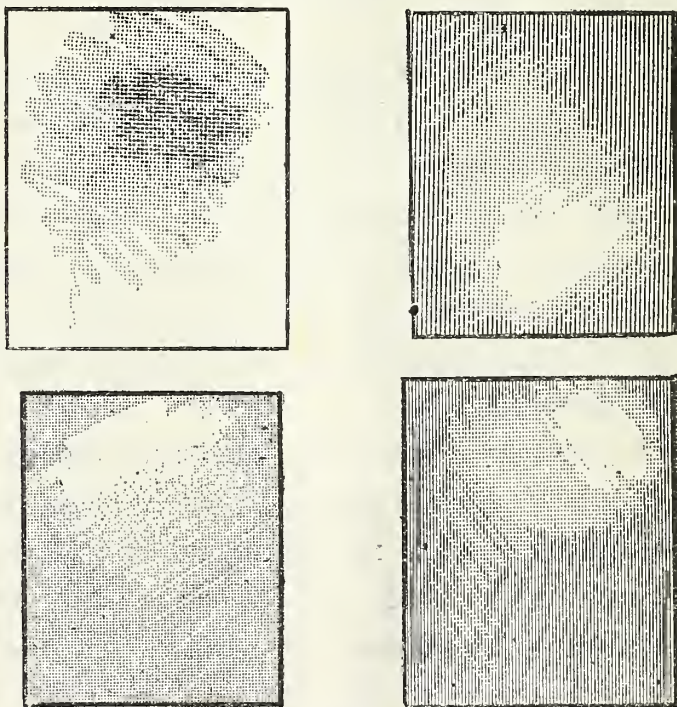
The most noticeable change is, that in the hands of *some* zincographers (by the way, the French seem to do this work better than ourselves) the lines *thicken*, and give a somewhat darker grey; but the change is generally trifling.

There is no necessity or reason why it should occur, however, if the zincographer can be induced to take the necessary care.

The seven descriptions of board made by Gillot are shown.

Besides these there are others made by Angerer and Goschl.

These are very brittle, and crack very readily if bent. They are also softer and coarser, and in consequence of



SCRAPER BOARDS (ANGERER AND GOSCHL BOARD).

the former peculiarity are more liable to develop faults in



SCRAPER BOARDS.—(6) White Aquatint Gillot.



SCRAPER BOARDS.—(7) White Canvas-Grained Gillot.



SCRAPER BOARDS.—Example 2. Black Straight Gillot.
(Reduced to one-fourth original size.)

working. That is to say, the scraper has to be handled with very great delicacy when scraping to produce a half-tone, or the artist may scrape through to the white before he is aware of it.

A few words in regard to reduction are necessary. Generally speaking, work on these boards may be reduced only just enough to sharpen the lines; but a very great reduction is possible—in Paris! Reference has been already made to the Salon Catalogue. There, drawings have been reduced in size to one-fourth (superficial) of the original drawing. This is readily shown by the closeness of the lines and the enormous amount of detail which, in many cases, is crowded into a drawing measuring only about 6 by 4.

To test the capabilities of the British zincographer in this direction the sketch on black straight Gillot has been reduced to one-fourth original size, and may be compared with the one not reduced.

CHAPTER III.

LALANNE, MICHALLET, ALLONGÉ, AND WHATMAN'S "NOT."

OUR zincographers have only recently awakened to the fact that a drawing made with a black lithographic chalk on a rough paper will reproduce as readily by the cheap photo-zinco process as does a pure line drawing.

It is strange that this simple fact should have so long

remained hidden, both from the British zincographer and artist, especially when it is remembered that such drawings have long been reproduced in Paris.

The artistic value of the "discovery" it would be difficult to overestimate.

It has made possible great freedom and individuality of expression.

Furthermore, the grain and texture of such drawings are essentially artistic and pleasing, and have not the slightest suggestion of the mechanical or conventional about them.

Of papers there are many, those named at the head of this chapter being the best and most representative.

Whatman's NOT and Lalanne are rough ; Michallet and Allongé are smoother.

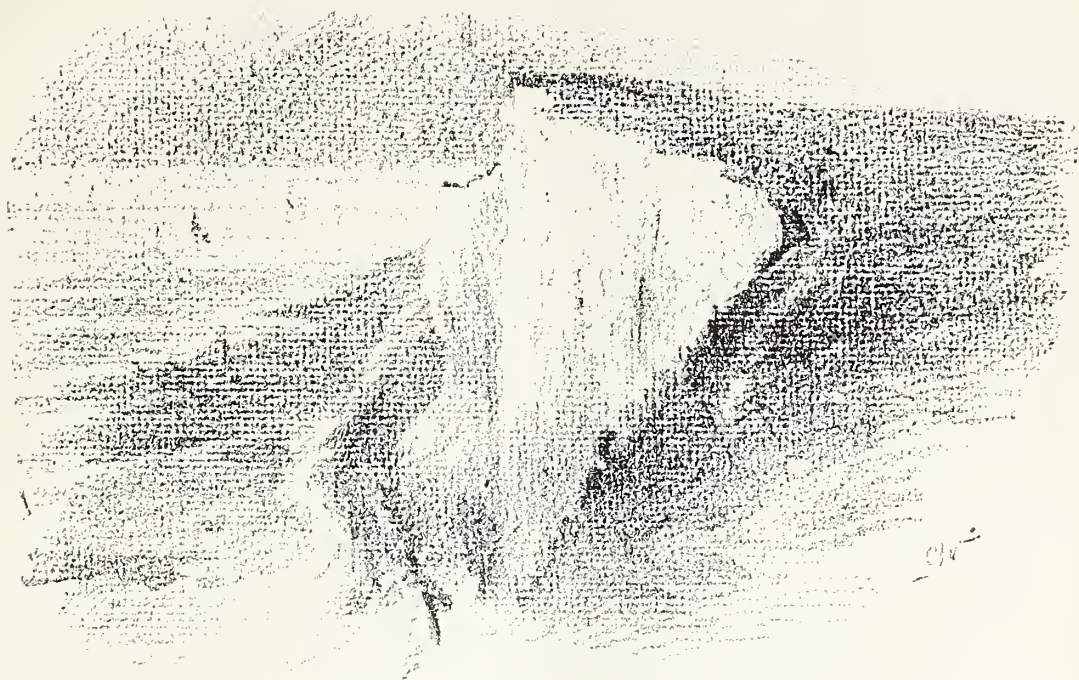
The Whatman's NOT surface gives an unequal, open effect, which reduces splendidly.

The Lalanne resembles it in a measure, but is more regular, and shows the wire-marks through the drawing. In this respect it resembles Michallet.

These wire-marks are lines which score the surface at distances of about an inch, and are produced in the course of manufacture.

The lines, as already mentioned, show in the finished drawing, and also in the reproduction.

In the opinion of many they are not objectionable ; but if they be considered so, they may be partially avoided by using the wrong side of the paper, on which they are less pronounced. To ascertain which is the wrong side the artist has merely to hold the sheet up to the light, and then use the side on which the name reads backward.



DRAWING ON LALANNE PAPER.



DRAWING ON MICHALLET PAPER.

Another way to get rid of them is to carefully fill up the spaces, after the drawing has been made, by the aid of a sharp-pointed lithographic chalk.

Allongé is of much the same texture as Whatman's Not, but is of much finer grain than either Whatman's Not, Lalanne, or Michallet.

Both Allongé and Whatman's Not are perfectly free from wire-marks.

All these papers, however, contain flaws or specks that are to be avoided.

A cursory glance along the paper will reveal them, as they generally take the form of little lumps, insignificant in themselves, but which may come in an awkward position in the drawing, if not duly noted and arranged for.

It should be mentioned that Allongé, like Michallet and Lalanne, gives a different effect on each side.

The right side is, in each case, slightly rougher, and the grain is higher, which latter trait is very essential to the production of clear, open work.

Drawings on these papers should be made considerably larger than they are intended to be when reproduced, as otherwise it will be found a difficult matter to get in the desired amount of detail. The coarseness of the paper makes this necessary, and is in itself an excellent reason for great reduction, as it invariably results in a closing up of the grain, and thus imparts fineness.

The act of drawing large, too, conduces to greater freedom of line and more ready disposition of mass.

As errors are not easily rectified, a careful outline of the intended drawing should be put in with a light, though fairly soft, pencil. The pencil should not be sufficiently

hard to require much pressure to make a distinguishable line, and yet not be sufficiently soft to give heavy lines that *might* reproduce and cause confusion.

If the pencil lines be inadvertently put in too heavily, they may be partly removed by means of a piece of crumbly bread or sponge rubber. The latter is the better, as it cannot possibly result in greasiness or smudging. These pencil-marks should, of course, be removed before the chalk-work is commenced.

Slight errors may be scratched away carefully, so as to leave no greasy marks, or, in those cases where this is impossible, or where a quantity of the chalk has to be erased, Chinese white may be used. It must be used sparingly, and not heaped up.

As the chief charm of these papers is their delightful unconventionality, the pen should not be used.

The roughness of the surface acts as a deterrent, for the pen does not take at all kindly to it, and anything approaching continuous work is most tiring and unsatisfactory.

The accompanying drawings have been reduced to one-quarter original size.



CHAPTER IV.

WASH-DRAWING.

ALTHOUGH authorities differ as to the relative merits of wash and body colour in process reproduction, a drawing in wash is probably the best from which to make a half-tone block.



DRAWING ON ALLONGÉ.



DRAWING ON WHATMAN'S "NOT."

Wash-drawing reached, too, we are confronted with a more delicate and complicated process than those described in the chapter on pen-drawing.

Those processes that answer admirably for line work are obviously incapable of reproducing the broad, grey masses of which a wash-drawing consists, for it has been already shown that such masses, whatever shade of grey they might be, would "come" solid black by the line-etching process.

Following the line adopted in the preceding chapters, an outline of the half-tone process (called Meisenbach, Swantype, &c.), by which all drawings that consist of masses of white, grey and black are reproduced, is given.

Nothing beyond a broad outline will be attempted, as there is a quantity of highly technical and uninteresting detail with which it is not necessary for the artist to trouble himself.

When making the negative from the original drawing an exquisitely fine screen, or network of lines, is placed very close to the sensitised plate. The latter thus receives an image of the drawing, and of the screen as well.

The negative is then placed over a sensitised zinc plate, and the whole exposed to the action of light.

Those parts *not* protected by this network are rendered insoluble; those portions covered by the network remain soluble and *wash away*, and thus is left a mass of dots.

These dots, moreover, are not of a uniform size, as might be expected.

The lighter and more transparent portions of the negative (representing the *darkest* parts of the original drawing) permit all the sensitised zinc, except that pro-

tected by the fine lines of the screen, to receive the full light ; while through the darkest, or opaque, parts of the negative (representing the *lights* of the original drawing) little light can penetrate, and hence the greater portion of the film beneath those parts afterward washes away.

Furthermore, where the light falls weakly the network tells proportionately stronger and the dot is *diminished* ; while where a strong light falls it decreases the size and consequently the shielding power of the network, and the dot is *increased* in size.

Thus are produced the masses of dots of varying size of which a half-tone consists.

Of the rolling-up and etching nothing need be said.

It is obvious that as the network covers the entire picture, a uniform tint or dot must pervade the whole, for even the highest tones allow *some* light to pass through the interstices of the network and fix the film on the zinc. Hence a pure white is not possible with half-tone as ordinarily worked.

This universal greyness has, unhappily, come to be looked upon as unavoidable ; but it is not so by any means.

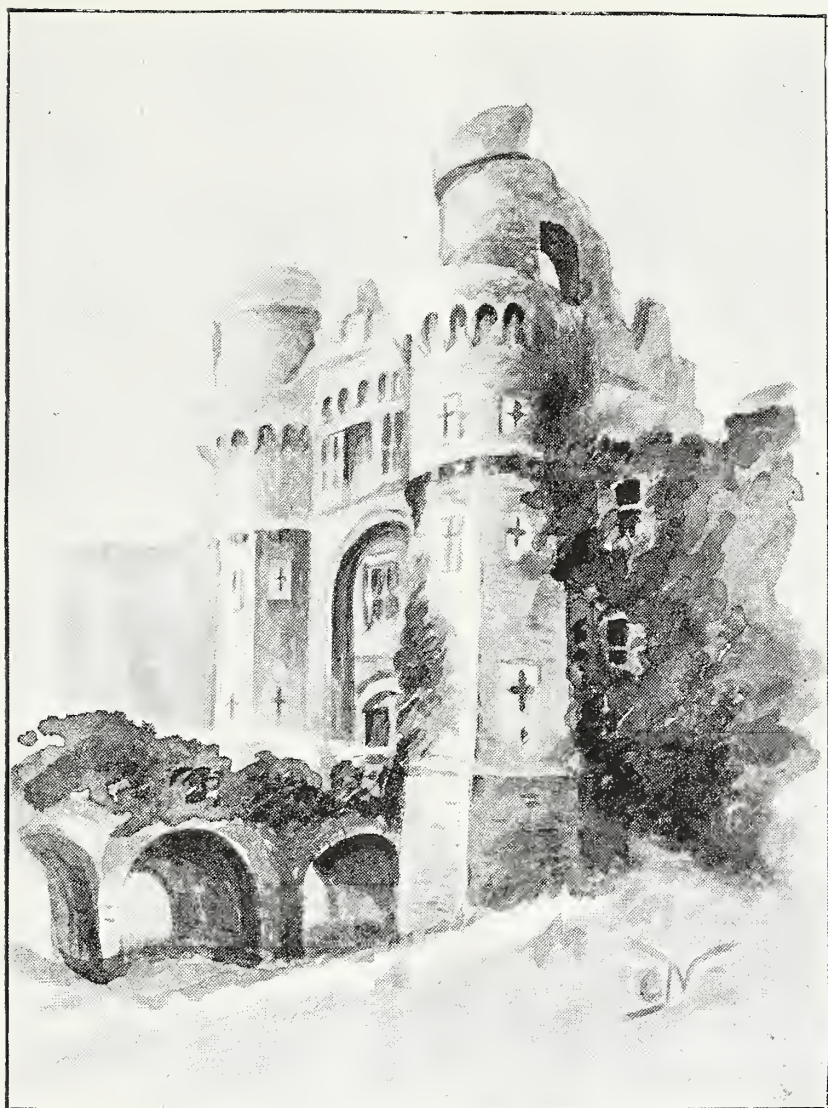
Indeed, much latter-day work is without this defect. This result is not obtained by gouging out the lights on the block. Such a proceeding is far too risky to be encouraged or lightly adopted.

The fact that a block is now made which gives an artist a colourable imitation of his original work should only make him the more loudly demand a perfect facsimile. It can be done.

One suggestion which comes from the process-man



WASH.—Example 1.



WASH.—Example 2.

should not be lightly disregarded. This is, that drawings be made on a board or other material that is quite smooth. Irregularities on the surface often cast shadows when photographing, and these shadows reproduce.

For wash-drawing a black inclining rather to brown than blue, but, preferably, simply and purely *black*, should be used.

Bourgeois's Encre de Chine, which has been already recommended for pen-and-ink, is also a good stable material for wash.

It has the peculiarity, however, of being absolutely indelible, even when diluted with a large proportion of water. It thus has the disadvantage that errors cannot be washed or rubbed out without injuring the paper; while the compensating advantage is, that wash can be laid upon wash without the slightest risk of disturbing those already applied.

The tendency to work up is one of the disadvantages of charcoal-grey and other blacks.

Charcoal-grey, ivory-black, and lampblack are very extensively used nevertheless.

Many artists in wash prefer to work on a Turner grey paper. The blue-grey forms a sympathetic groundwork merely; it must not be trusted to lend any of its greyness to the sketch, as it is too blue to reproduce.

When work be done on this paper it is necessary to use Chinese white for the lights.

A drawing on Turner grey paper is herewith reproduced (Example 1).

The study of the gateway of Hurstmonceaux Castle is made on white paper.

In both cases the same black (Bourgeois's Encre de Chine) was employed.

The artist will be wise not to combine body colour and wash, for the mixture is dangerous; the greys are so divergent, and therefore misleading. We may have two greys of the same strength, the wash warm in tone, and the body colour blue and cool; but they will not be of the same strength to the camera, or rather the sensitised plate.

In expressing an opinion favourable to wash-work for purposes of reproduction, it does not necessarily follow that body colour is condemned. On the contrary, it would be ridiculous to do so, for a quantity of excellent work has been reproduced from body-colour work, and is often to be seen in the pages of popular magazines and periodicals.

But wash is given preference on account of its limpidity and softness; for the opaque body colour undoubtedly often 'comes' harsh, by reason of some of the greys "coming" lighter than they appear to the eye.

There is no reason, however, why the high lights (whites) of a wash-drawing should not be put in with Chinese white.

In Example 3 a mixture of body colour and wash was used. That is to say, the major portion is pure wash, but some of the greys have been put in with body colour.

The greys on the legs of the modelling stand have lightened, and have a tendency to harshness, which would not have been had wash alone been used. This throwing out of "values" is often a matter of great importance, and might have unpleasant results in some cases.

There is little more to say about wash-work, beyond



WASH.—Example 3

recommending that the various shades of grey be well defined and not worked too much into each other.

As charcoal, unless the drawing be made on a very rough paper with a charcoal point, can only be reproduced by the half-tone process, it is mentioned here. Charcoal, however (bold, vigorous work excepted), is too soft and indistinct to reproduce well by so clumsy a process, and much of its tender beauty and charm of suggestion is invariably lost.

CHAPTER V.

DRAWINGS IN OIL.

DRAWING in oil for process reproduction promises to become more popular than it has hitherto been.

It was considered (and proved to be the case) that the ridges and marks left by the brush, cast shadows which would be reproduced in the photograph and on the block.

Paintings in oil, however, afford such a tempting opportunity for display of power in handling, and of individuality, that it is not remarkable that some artists should have disregarded its defects, nor that others should have endeavoured to obviate them.

Besides, an oil drawing is not necessarily lumpy and uneven ; neither are breadth and vigour incompatible with smoothness of surface.

In any event, the reproduced brush-marks are streaky, perhaps, but not always objectionable.

If the precaution be taken to keep them out of the high lights and the paler greys, the middle and dark tones may be allowed to show them ; they are not so important or conspicuous.

Some excellent work in oil has been printed in the pages of the *Graphic*, and anyone who is an admirer of vigorous, crisp brush-work will there find it.

Themes from the sea seem peculiarly well-adapted to black-and-white in oil. The swirling water and a wild, ragged sky lend themselves admirably to interpretation by the oil medium.

If gentle gradation of tones is a thing to be avoided in wash, it is even more necessary to force the effect in oil, for the drawback of oil black-and-white is its proneness to "come" flat and lifeless.

By flatness is meant that monotonous uniformity which is so apparent in the accompanying sketch (Example 1). There is not one sharply defined light in the drawing, but it so happens that the dress is rendered *quite black*, or the figure would be sadly wanting in boldness and relief, for the simple reason that the greys adjoining it are too dark.

The landscape (Example 2) shows how easily this may be obviated.

In a sense, "black-and-white" in oil is a misnomer, for it would hardly do to employ pure black and white.

A good tint for process is made up of two parts of bone-brown and one of ivory-black.

The following is even better, as it gives a *warm* pale grey without the greenish tinge present in the other : Ivory-black, two parts, and bone-brown, two parts, mixed, and warmed with a considerable dash of crimson lake.



OIL.—Example 1.



OIL.—Example 2.

The artist need not be punctilious in the matter of proportions; but the mixture should not be purple, and sufficient should be mixed for the work intended before commencing to paint. It is also necessary that the tints be *thoroughly* mixed. If, in spite of a free use of turpentine, the drawing dry with much gloss, the latter should be removed by applying liqueur-à-mater to the surface.

It should not be applied until the colour has set, and should be then laid down with a flat brush as though it were a varnish.

The flattest surface procurable should be chosen for painting on. Academy board, millboard, and French fine canvas offer the best surfaces. This latter was used for the second example illustrating this chapter. Its superiority over the other materials mentioned (Academy and millboard) lies in the fact that it has a pleasant tooth or bite, and thus enables the artist to work with great ease and comfort.

CHAPTER VI.

PREPARATION OF PHOTOGRAPHS FOR REPRODUCTION.

FEW photographs are sufficiently clear and well defined to permit of reproduction by the half-tone process without some preliminary working up.

This preparation requires some skill and considerable judgment, and as many periodicals are displaying a

marked leaning toward photographic illustration, it bids fair to develop into an industry.

Therefore, although this latest phase or requirement of illustration may be mechanical rather than artistic, it would be impolitic to ignore it.

In the majority of photographs the shadows are too intense and the lights too subdued to reproduce well by half-tone.

The rich brown shadows of an ordinary untouched photograph (we say "ordinary" because *all* photographs are not brown) "come" almost solid black in the reproduction, and it is the retoucher's business to lighten and tone out these shadows, so as to cause them to reproduce in their true and proper value, or even to reproduce lighter than they appear in the original, for the camera always has a tendency to accentuate shadows.

The materials necessary for the work are sepia, lamp-black, Chinese white, and ox-gall.

The proportions of the three former must be varied according to the tone of the photograph.

If it inclines very much to brown, sepia alone should be used, as black and white give a grey that is blue in contrast with the photograph, and as a consequence such greys appear to (and do in reality) reproduce lighter.

This is made all the more noticeable because the rich brown of the photograph reproduces deeper.

Therefore, while one portion is deepened in reproduction, another portion is lightened, and it would be difficult to decide which is the more detrimental.

To keep the retouched portions of the same tint as the photograph should be the object aimed at.



PREPARED PHOTOGRAPHS (Prepared).



PREPARED PHOTOGRAPHS (Unprepared).

The very dark tones, and particularly those that lie in the middle distance, should be broken by carrying sepia, mixed with just a suspicion of white, over them.

This at once renders them lighter and less brown; for white imparts a blue tinge, not alone to black, but to brown as well. Dark tones thus treated are more certain to reproduce as intended. It is, indeed, safer to touch and work over all the deep portions, and thus make them deep *grey*, instead of permitting them to remain deep *brown*. This is of importance, as it has the result of making the unpleasant effect of inaccurate values less likely to occur.

Ox-gall is used to impart a bite to the greasy photograph, and enable the surface to be worked upon with comfort.

By its aid thin washes can be laid with the greatest ease. It may be used in the proportion of one part ox-gall to two of water; or the photograph may be coated with the undiluted ox-gall previous to painting, and plain water afterwards used. The former method is preferable.

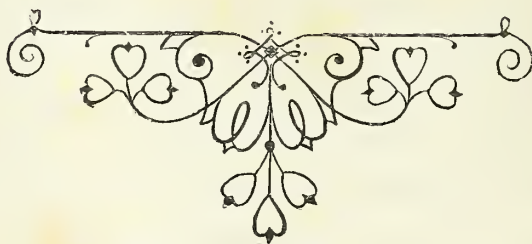
One serious difficulty met with when working in opaque colour is, that it dries considerably lighter than when wet.

Much time and labour may be saved by mixing a series of tints in tinting saucers; five should be sufficient. Tests should then be made on paper and allowed to dry.

This precaution enables the artist to apply the exact tint he requires in any particular spot, and as a consequence there is less sacrifice of detail, and also of breadth, than may be the case where sepia and black and white are mixed on the brush just previous to application. Furthermore, it prevents that multiplicity of shades and gradations that

are so unnecessary, nay, wasteful, in work for process reproduction, because the greater part are lost.

It has been suggested that all the dark parts of the photograph should be retouched. It is often advisable to retouch the light parts also, and thus remove *all* the brown, and with it all likelihood of confusion of values.



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AND AT 154, PICCADILLY, W. (WALSINGHAM HOUSE).

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See page 18.

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See pages 12 and 15.

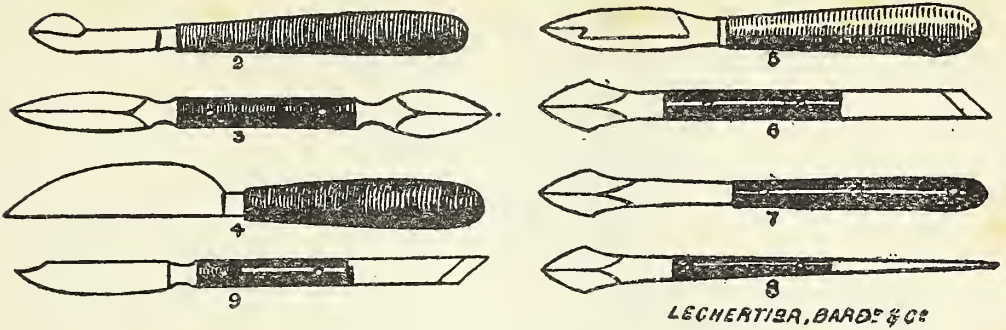
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(See page 12.)

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(See page 6.)

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(See page 27.)									

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